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Archaeological
Institute
of America

GENERAL MEETING OF THE ARCHAEOLOGICAL
INSTITUTE OF AMERICA

DECEMBER 26-28, 1901

THE Archaeological Institute of America held its third annual meeting for the reading and discussion of papers at Columbia University, in New York, December 26, 27, 28, 1901. The meetings were presided over by the President of the Institute, Professor John Williams White, except Thursday evening, when Professor James R. Wheeler presided, and Friday morning, when Professor Thomas D. Seymour occupied the chair. Friday afternoon the Institute met in joint session with the Society of Biblical Literature and Exegesis. At the meeting of Friday evening, December 27, the Acting President (now President) of Columbia University, Professor Nicholas Murray Butler, delivered an address of welcome, after which Professor Thomas D. Seymour delivered the Annual Address before the Institute, on *The First Twenty Years of the American School of Classical Studies at Athens*. After this session, President and Mrs. Butler held a reception.

A resolution was passed thanking the authorities of Columbia University for their hospitality and expressing thanks to President and Mrs. Butler for the reception of Friday evening.

There were five sessions at which papers, many of which were illustrated by means of the stereopticon, were presented. Brief abstracts of the papers, prepared by the authors, follow.

THURSDAY, DECEMBER 26. 2.30 P.M.

Address of welcome by Dr. Julius Sachs, President of the New York Society of the Institute.

1. Professor Joseph Clark Hoppin, of Bryn Mawr College, *A Cylix in the Style of Duris*. (Read by Dr. George H. Chase.)

This cylix was acquired by me in Athens in 1896 and was said to have been found near Naples. Form, that commonly used by the masters of the Euphronian cycle. Height 6 inches, diameter 14 inches. On the interior a Silenus and a nymph. On the exterior a thiasus; Dionysus and Sileni and Maenads on one side, and on the other Sileni and Maenads, five figures in each group. Inscription on the interior.

The resemblance of this cylix to other vases with the signature of Duris is too marked for any doubts to exist as to whether the vase should be attributed to him. The exterior is almost a duplicate of the cylix signed by Duris in Boston (TARBELL, *Am. J. Arch.* 1900, pp. 183 ff.). Other features characteristic of Duris are the drapery with its fine lines, the profiles, maeander and cross pattern around the central picture, exergue and employment of five figures in each group. The style of the figures on the interior is slightly better than those of the exterior. The representation of a thiasus is rather rare in the work of Duris, and the use of the feminine form of inscription is not found on any of the vases signed by him. On the whole the vase is in point of execution as good as any other vase attributed to him, if not better.

2. Professor Frank Cole Babbitt, of Trinity College, *An Ancient Herm from Trachones*. (Presented in abstract by Professor John H. Wright.)

In the spring of 1896, at Athens, Professor George D. Lord, of Dartmouth College, called my attention to an ancient Herm, which is at Trachones, a village near Athens, in the house of Mr. George Petousi, Deputy of Thebes. The Herm, in its present state, is a rude quadrangular slab of the native *poros* stone, about 30 inches high. Projections on either side with unfinished surface indicate that it was probably set in a wall. The back also is unfinished. The head has been broken off, but on the front there still remain the *membrum virile* and traces of the working of the hair. On the front is also an inscription in the old Attic alphabet, in letters of about 560-550 B.C., as follows:

Ἑρμῆν Εὐφρονίδης τόνδε
Καλ(λ)ίας ἐπόησεν

Doubtless the inscription was meant to form an hexameter line. The poetic order suggests this, and examples like, τóδε Κάλων and ἀνέθηκεν Κάλλωνος¹ make τόνδε Κάλίας (*sic*) far from impossible.

3. Dr. T. W. Heermance, of Yale University, *The Reciprocal Influence of the Doric and Ionic Styles in Greek Architecture*.

The influence of the Ionic on the Doric style is chiefly shown: (1) by the sporadic and experimental use of Ionic mouldings in place of Doric from the latter part of the sixth century; (2) by the enrichment of Doric architectural members by means of Ionic mouldings, either alone, or in conjunction with Doric mouldings (the Lesbian *kymation* under the horizontal geison alone becomes a permanency); (3) by the assimilation to the Ionic of the Doric raking geison in form and the horizontal geison in position.

Corresponding influences of Doric on Ionic are insignificant, but a triglyph frieze or a complete Doric entablature is used with Ionic (or Corinthian) columns in Hellenistic work in the second century. The mixture is first made at Pergamon.

Remarks were made by Professor Allan Marquand.

4. Professor Allan Marquand of Princeton University, *Robbia Pavements*.

The history of the pavements made by various members of the Della Robbia school is usually limited to the brief statements made by Vasari. Our knowledge of this subject may be amplified by a study of the designs used by this school especially for ceilings and for the backgrounds and subsidiary decoration of large sculptured monuments. Several of these pavements still exist, a fine example by Andrea della Robbia now decorating a chapel in the Collegiata at Empoli. Others of similar pattern are found at S. Fiora, at Montevarchi, and at S. Gimignano.

The pavement made by Luca della Robbia the younger for the Loggia of the Vatican no longer exists *in situ*. But a few tiles, preserved in a case in the Sala Borgia, and a drawing made in 1745 by a Spanish painter Francesco La Vega, enable us to reconstruct its general character. One of the rooms of the Vatican still contains in good condition a Robbia pavement bearing the insignia of Leo X,

¹ F. D. Allen, *On Greek Versification in Inscriptions (Papers of the American School at Athens, Vol. IV)*, pp. 74 and 79.

and other tiles of similar character are preserved at the Pantheon and especially in the chapel of Fra Mariano in the Church of S. Silvestro al Quirinale.

5. Dr. Edgar S. Shumway, of the University of Pennsylvania, *Notes*: (1) *On the DVENOS Inscription*; (2) *On the so-called Senatus consultum de Bacchanalibus*; (3) *On the Sanction in Legal Inscriptions*.

[No abstract of this paper has been received.]

6. Professor Arthur Fairbanks, of Iowa State University, *On the So-called Mourning Athena Relief*.

An examination of the relief makes it probable that the artist is reproducing some statue of about the middle of the fifth century B.C. The pillar is to be interpreted as the *meta* of a palaestra, in which case the relief represents Athena looking down with favor upon men offering her worship at the palaestra. On an early white lecythus in the Museum at Athens is seen an Athena in the same attitude and much the same dress; it is not improbable that both vase-painter and relief sculptor drew their inspiration from the same source.

7. Mr. James Tucker, Jr., lately of Providence, *Some Statues from Corinth*. (The author of this paper, a promising and beloved member of the School at Athens in 1899-1900, was drowned in the Nile, March 24, 1900. This paper was read by Professor John H. Wright.)

The marble statuary found in the course of the American excavations at Corinth is almost wholly of Roman date. Among the exceptions are two vigorously rendered lion's-head spouts, which were found in the fountain-house of Glauce; they are earlier in date than those of the Tholos of Epidaurus and not far removed from those of the Parthenon, plainly belonging to the period of the Hellenic constructions of Pirene. Of Roman date may be mentioned a portrait statue of the type of the Polyhymnia of the British Museum; two colossal female statues, not unlike the Artemisia from the Mausoleum and the Canephoraë of the Villa Albani, respectively; a beautiful torso of a small nude Aphrodite, of the Capitoline type; a seated god (probably Dionysus), with a panther at his side, not unlike the figure on the choragic monument of Thrasyllus in Athens; and a male portrait head of a familiar type. Each of these objects

was fully described in the paper, and numerous analogues for all in Graeco-Roman art, as also in some cases in earlier art, were pointed out.

8. Mr. Eugene P. Andrews, of Cornell University, *The So-called Restoration of the Parthenon now in Progress.*

[Mr. Andrews showed stereopticon views and commented on the work of "restoration."]

THURSDAY, DECEMBER 26. 8 P.M.

1. Professor William K. Prentice, of Princeton University, *The Sanctuary of Zeus Madbachos on the Djebel Shêkh Berekât in Syria.*

The Djebel Shêkh Berekât is a mountain peak about halfway between Antioch and Aleppo. On its summit is the sanctuary of two gods known as Zeus Madbachos and Selamanes. In November, 1899, three members of an American archaeological expedition visited this sanctuary. An account of the results of their investigations, together with the text and a discussion of ten inscriptions found there, is expected to appear shortly. These inscriptions were originally on the face of the temenos wall, and show that the temenos was constructed at the end of the first and the beginning of the second century after Christ, by various persons, at their own expense, in fulfilment of vows. It also appears that the Roman system of measures was employed, but that the local units, a cubit of 412.5 mm. and a foot of 275 mm. were retained, and finally that the cost of the masonry was $5\frac{1}{4}$ drachmae per square cubit of surface, or about 22 cents per English cubic foot.

One of the two gods worshipped at this sanctuary, Selamanes, has been identified by C. Clermont-Ganneau and Georg Hoffmann with the Assyrian god Shalmânu. The name of the other, Madbachos, is derived from the Syriac word *Madhbaḥ*: "altar." This explanation of the name, which was suggested by M. Clermont-Ganneau, is proved by an inscription found by this expedition at Burdj Bâkirbâ, on the gateway of the temenos of "Zeus Bomos." Both here and on the Djebel Shêkh Berekât there was an ancient altar, traces of which still exist. Each shrine was a "high place" of ancient Semitic worship, where in Roman times a temple and a temenos were built. And yet in neither case was any name given to the local divinity other than "Zeus Bomos" or Zeus "*Madbachos*," the

"Altar-god" of that locality. Strangely enough, however, on the Djebel Shêkh Berekât the foreign god Selamanes was associated with the purely local deity.

2. Dr. Charles Peabody, of Phillips Academy, Andover, *Explorations in Mississippi*.

Under the auspices of the Peabody Museum of Harvard University, explorations in Mississippi were undertaken in May, 1901.

The first mound opened is on the plantation of Mr. Ellerton Dorr, Jr., in Clarksdale, Coahoma County. In ground plan it is oval; the dimensions are: height, 9 ft. 6½ inches; length from north to south 90 feet; breadth from east to west 60 feet. It was cut away down to the surface of the surrounding field in sections five feet in thickness, the earth of one section being thrown into the space left by that preceding. The entire mound was thus cut through and put back; the work was begun on May 11 and completed May 18. Both recent and older burials were discovered; traces of eleven of the former and of sixty of the latter were counted; the older bones were in poor preservation. In addition, pottery, shells, and lead ore were taken out. Of note are a vase with circular rim and triangular base and a second vase with convex circular base and concave, in-sloping sides; this one is broken and incomplete.

Another mound situated on the plantation of Mr. P. M. Edwards, at Oliver, Coahoma County, was opened and excavations made through nearly one-half of its material. The dimensions are: length, from north to south, 195 feet; breadth, east to west, 180 feet; height, 25 feet; the ground plan is oval. There were no recent burials, but sixteen older skeletons were discovered in fairly good preservation. Most of these were buried in the so-called "bundle" form, the bones being carefully laid, the long ones side by side and the skull often toward the north or the east. Pottery, bone, and stone implements, beads of glass and shell, a brass bell, ashes, charcoal, bark, and numerous shells were found. The pottery is usually decorated with incised lines, but many fragments are stamped or worked into ridges with thumb and finger. In the vicinity of this mound hundreds of arrow and other points were picked up in fragments or complete; these are of flint-like stone and in nearly all cases chipped with very great skill and delicacy. Scrapers of a similar type were abundant.

Both mounds had originally been surrounded by other smaller mounds, the presence of which is now proven by slight uneven-

nesses of surface and by the numerous pottery fragments to be seen at these places. While part of these mounds are almost necessarily post-Columbian, some time may have elapsed between the beginning and completion of the works. It is impossible to set an absolute date.

Work was suspended on June 28, 1901.

3. Professor E. D. Perry, of Columbia University, *Some Illustrations of Dörpfeld's Ithaca-Leucas Theory*.

As the title indicates, this paper was chiefly a commentary and explanation of some lantern-slides from photographs taken at Leucas and the neighboring island of Arkoudi. Dörpfeld's arguments, as already given by Professor Smyth in *The Nation* (August 16, 1900), were briefly summarized, and one or two considerations added which seem to favor Dörpfeld's theory; e.g. in *Odyssey* XIV, Odysseus, inventing a tale to account to Eumaeus for his arrival at Ithaca, says the king of the Thesprotians sent him away on a ship bound for Dulichium; but as soon as the ship was well away from shore the crew seized and bound him, in order to sell him into slavery. At evening—evidently of the same day—they reached Ithaca, which is here spoken of as if it had been the first port accessible. Now a day's sailing, with a northwest or west wind, would just about bring a vessel from a Thesprotian port to Leucas. This is not in itself much of an argument, but may be of some weight in connection with others.

The island of Arkoudi answers extremely well to the Homeric Asteris, if Leucas be assumed as Ithaca, as was shown by the views exhibited. On the whole, however, Dörpfeld's theory is still far from proven, and is probably not susceptible of satisfactory proof.

4. Professor R. B. Richardson, Director of the American School at Athens, *An Ancient Fountain in the Agora of Corinth*. (This paper was read by Professor Wright.)

In the spring of 1901 was completed the excavation of the Ancient Fountain in the Agora, which lies about 25 m. west of the western end of the Propylaea. It ranks with Pirene and the temple of Apollo as one of the most interesting monuments of the ancient city. It consists of two parts, the fountain chamber proper, and a painted Doric frieze of triglyphs and metopes that encloses it. The latter consists of a long east front and a short southerly front, which meet at an obtuse angle; on this frieze the original stucco and painted decoration, which conform strictly to the laws of Doric

polychromy (FENGER, Taf. vii), are still preserved. Back of this triglyphon, and on a level with its upper surface, was anciently constructed a platform on which stand statue-bases of Roman date, and evidences of statue-bases of an earlier date, which are in part in line with the triglyphon. The triglyphon itself is pierced on the east front by a passageway, from which descends inward a flight of seven steps to the original level of the fountain-chamber, about 7 feet below the level of the top step; on the front of the low wall opposite are openings of water-pipes into two bronze lion's-head spouts, still *in situ*, while along the base of this wall are gutters. At some time—before the erection of the transverse triglyphon—this fountain-chamber was more open to approach on its original, lower level (this appears from certain constructions beneath and in front of the triglyphon), and appears to have been quadrangular in shape. This ancient fountain-chamber, with its lion's-head spouts, dates apparently from about 500 B.C. Subsequently, but probably not later than in the last third of the fourth century B.C., the triglyphon was erected; some filling-in was done behind it to the level of its top, and the flight of stairs constructed, the fountain being evidently still in use. At about the same time a street pavement, ascending from the east, was laid along part of the southern line of the triglyphon. These dates are attested, not only by general architectural considerations, but especially by the presence of certain statue-bases that are bedded on the triglyphon, or in line with it, two of which are inscribed with the name of Lysippus. At a very much later time, doubtless early in the Roman period, further filling-in took place; a platform was constructed—flush with the top of the triglyphon—over the whole fountain-chamber, including the steps, and new statue-bases were set up, which disregarded in part the lines of the triglyphon. Again, in Byzantine times, when the process of the accumulation of earth upon this platform had long gone on, a new platform was constructed, of poor marble slabs, which is about 4 feet above that of the Roman period.—This excavation affords an interesting example of archaeological geology: a Byzantine level, a Roman level, a Greek construction not later than the fourth century B.C., and a more ancient Greek level. It is a wonderful chance that has preserved this early fifth-century fountain intact to our times.

5. Mr. Eugene P. Andrews, of Cornell University, *Newly Discovered Facts in Regard to the Different Series of Ornament Attached to the Architrave of the Parthenon.*

With the aid of photographs, Mr. Andrews described briefly the traces left on the architrave of the Parthenon, by decoration which has been affixed to it at various times.

The traces are holes cut into the marble and shallow ruts in arcs of circles. The holes are either rectangular or round. Traces of some sort occur on the architraves of all four sides and on the blocks on the ground from the north and from the south architrave. On the east architrave the mortices are under the metopes; twelve of them are approximately square, and most of them contain lead holding iron dowels. The two end ones are oblong and are empty. Holes like the last two occur over each column of the north side; that is, under every second triglyph. These are all empty except the one over the northwest column. This contains a heavy bronze dowel wedged in. The smaller connection between the dowel and its shield has been broken off about flush with the face of the architrave.

A hole more or less nearly square and rudely cut is over each column of the west end and of the south side, except that the holes over the corner columns are like those on the north architrave.

On the north architrave and on the south architrave, under each triglyph, are three round holes 0.002 m. in diameter, drilled into the stone, placed as if forming the points of triangles of various shapes. A circle, serving to intersect the three points, has a radius in each case of about 0.415 m. On the Nike bastion are three larger empty round holes with the same arrangement and radius. In most cases the small round holes on the architrave contain iron nails broken off flush with the surface.

Over each of the two middle columns of the east end is an oblong hole containing lead and iron. If shields belonged to these, they covered each a group of letter holes of the Nero inscription. In each case, also, a hole on each side of the group has been enlarged, and holds the lead and the iron or bronze peg which held the edge of the shield fast. In the case of several of the other mortice holes, small holes on the circumference of a circle, with an average radius of 0.515 m., seem to point to a like use of clamps on the edges of the shields.

The south group of letters of the Nero inscription covered half the space about the south shield hole.

The following conclusions were drawn:

(1) There were several different series of decoration on the architrave.

(2) Twelve shields, not uniform in size, were on the east architrave about the middle of the first century after Christ.

(3) Probably the two end shields of the east architrave belonged to the same series with the shields of the north architrave and of the other corners. Their diameter was a little over a metre.

(4) The workmanship of the holes and the bronze dowel in one of them speak for their relative age.

(5) On the north and on the south architrave was a decoration, at a different time, about 0.83 m. in diameter.

(6) The shields of the west end and of the south side seem to have been a separate series.

(7) Two shields, with a diameter of 0.84 m., were placed on the east architrave after the Nero inscription had been removed.

6. Mr. Edward L. Tilton, of New York, *Concerning the Two Temples of Hera at Argos.*

The remains of the two temples of Hera at Argos, or more properly, at the Argive Heraeum, exhibit certain features which are unique, besides throwing additional light upon various known phases of Greek architectural art. The older temple antedated, apparently, all others in Greece whose ruins are known to us. The second temple, to judge from the remains, must have exemplified all that was best in Greek art, in refinement of design, beauty of execution, in proportions, materials, polychromy, and sculpture.

The old temple was built upon a platform or terrace supported by a Cyclopean wall constructed of large boulders. A portion of this platform was paved with irregular limestone blocks which served in part as a foundation for the temple. The remains of a stylobate and a few odd stones seem to justify the conclusion that the temple was a hexastyle, with fourteen columns on the side, and with a cellar 36.30 m. in length by 8.50 m. in width, or width to length as 1 is to $4\frac{1}{4}$, which is the proportion we might expect to find in a temple of great antiquity.

The second, or Fifth Century temple, was built by Eupolemus upon a lower terrace, which was carefully constructed by cutting and filling. The remains indicate that the temple was hexastyle, with twelve columns on the sides. The stylobate was constructed of limestone; the walls, columns, and the entablature, except as noted, were of poros stone; the metopes, cyma, and roof tiles were of marble.

FRIDAY, DECEMBER 27. 9.30 A.M.

1. Dr. Ernst Riess, of the De Witt Clinton High School, New York City. *Some Names found on Coan Inscriptions.*

It is well known that Greek families liked to choose their names with reference to the divinities especially worshipped by their members. Names, therefore, form an important source for the history of religion, especially for the discovery of old and obliterated divine beings. An investigation into the proper names of the island of Cos shows an astonishing lack of names composed with the name of that god to whom the island owes its chief fame, Asclepius. It also shows that in spite of the Dorian origin of the inhabitants, the Dorian gods proper, Apollo, Heracles, Demeter, and even Zeus, are but sparsely represented. On the other hand, names composed with elements meaning "best," "light," "life," "saving," form an abnormally large percentage. The conclusion is drawn from this, that these names contain the proof of an ancient worship of a god, or a circle of gods, whose sphere of influence was ever this, namely, protection, salvation, healing, and that in later times Asclepius was substituted for this aboriginal divinity. The existence of divine beings of the name of Aristos or Ariste, and their relation to the same sphere, has been known from other parts of Greece. And the continuation of an old "Carian" cult on the island, even after the Dorian invasion, is furthermore supported by the analogous continuation of the worship of Hecate Stratia, belonging to a similar sphere of influence.

2. Professor Charles C. Torrey, of Yale University. (1) *A recently discovered Phoenician Temple Ruin*, (2) *A Hoard of Ancient Phoenician Silver Coins*.

(1) In the autumn of 1900, the remains of a Phoenician temple were discovered in a hillside just south of the Awaly river, about a mile and a half north of the present city of Sidon. The ruin was that of a large quadrangular building, enclosed by a massive wall built of limestone blocks, which were nearly cubical in shape, from three to four feet thick, and very nicely squared and fitted. An inscription in the Phoenician language, found on several of the stones which composed the wall, gave the name of the builder as Bad-Ashtart, King of Sidon, and grandson of King Eshmunazar; and stated that the temple was dedicated to the god Eshmun.

The site was partially excavated, in the early summer of 1901, by Macridy Bey, of the Imperial Ottoman Museum in Constantinople. The work was done in a thoroughly scientific manner, and yielded many interesting results, of which we may expect a full report in due time.

(2) Early in the year 1901, a hoard of ancient silver coins was unearthed near Sidon. At the time when the collection was seen by

the writer, in the spring of that year, it consisted of perhaps fifty coins. These were all Phoenician octadrachms, mostly of the well-known type designated "Class III," in Head's *Historia Numorum*, p. 671. Two specimens belonging to the older type of the time of Artaxerxes II (Class II, *ibid.*) were of especial interest, as they seem to have been hitherto unknown. On the one, just above the towers of the city (obverse), appear the letters *bēth, mēm*. On the other, the letters *ain, bēth* appear just above the reins of the chariot (reverse). Both of these coins, as well as the majority of their fellows, were in an excellent state of preservation. The writer secured the two just described, and a few others. It is to be hoped that all of the coins which formed this hoard may be kept in sight until a complete description of it can be made.

3. Dr. Alice Walton, of Wellesley College. "*Calynthus*" or *Calamis*; a note on Paus. X, 13, 10.

Whether we adopt in Paus. X, 13, 10, τέχνη . . . ἱππέων, the smooth reading ἐστήκασιν ἔργα, or believe that some form of *συνεργός* is contained in this vexed passage, an unusual distinction is made in the work of the artists who made the second offering of Tarentines at Delphi, the text implying that the work as a whole, that is, its composition and central group, is the work of Onatas the Aeginetan, while the accessory figures of horsemen and foot-soldiers and possibly the fallen warrior were done by "Calynthus." As Pausanias was especially accurate in Book X in identifying an artist introduced for the first time unless he was well known, "Calynthus" was a man of some note whose name was confused by a scribe with the name Phalanthus occurring three times just below. Brunn has suggested that this artist was Calamis, a view which seems plausible when we consider a similar division of work in the Syracusan offering at Olympia, and that Calamis was noted for his renderings of horses.

If we assume that the king of the Peucetians was represented in the central group, the natural reconstruction is that of conventional warrior-groups of the period, in which the Tarentines correspond to Greeks, and the Peucetians to barbarians. Opis lies prostrate in the centre; Taras, the eponymous hero of Tarentum, and the king of the Peucetians are above him to right and left, while Phalanthus-Poseidon, characterized by the dolphin, stands in the centre, with his face turned toward Taras to signify that his is the victorious side. Horsemen and foot-soldiers flank this central group, turned obliquely toward it.

4. Professor George A. Barton, of Bryn Mawr College,
(1) *A Babylonian Deed of Gift from the Sixth pre-Christian Millennium.*

The tablet which forms the subject of this note is in the E. A. Hoffman collection of the General Theological Seminary in New York City. It was purchased by Dean Hoffman in 1898. The Bursar of the Seminary informs me that it was purchased in Paris. The tablet is formed of a hard black stone, and is $3\frac{3}{4}$ inches square. It is convex in shape, being probably an inch thick at the centre, and sloping toward the edges. The edges are $\frac{3}{8}$ of an inch thick in the middle, but much thinner at the corners. The figures on it are cut about $\frac{1}{8}$ of an inch deep; the other signs are distinctly cut, but by no means as deeply. At the bottom of col. II a circle was cut by mistake and erased. This has made the tablet considerably thinner at that point.

My attention was first called to the tablet about a year ago. While making a study of the archaic inscriptions which had been published, I noticed the statement concerning this tablet in Radau's *Early Babylonian History*.¹ It was evident that Radau had not read the tablet. Later, one of my pupils, Miss Ellen Seton Ogden, through the courtesy of the authorities of the Seminary, secured a copy, and we made considerable progress in its interpretation. In September of the present year I was permitted to collate the tablet again. This enabled me to obtain a clearer impression of some of its most peculiar signs, and to establish the fact of the erasure above mentioned. Otherwise I found it necessary to make no changes in Miss Ogden's copy.

Further study of the tablet has made it evident that it is almost identical with a tablet in Paris which is as yet unpublished, but which Thureau Dangin mentions in the preface to the *Supplément* of his *Recherches sur l'origine de l'écriture cunéiforme*, designating it as γ , and many of the signs of which he cites in the table which follows. When those signs and their position on tablet γ are examined, they correspond, with one exception, to the signs of our tablet, column for column and line for line. When this *Supplément* was published in 1899, Thureau Dangin had not identified all these signs.

In interpreting the tablet I have worked from the starting-point furnished by the numbers. It is evident that the first of these gives the area of a field, and probable that those which follow give the dimensions of its various sides. This supposition has proved cor-

¹ Radau's *Early Babylonian History*, pp. 12 note, and 321.

rect. The tablet so far yielded up its meaning that I have given a tentative transliteration and translation of it in my *Sketch of Semitic Origins*,¹ which is now in press. The tablet itself is of such interest to Babylonian palaeography as well as to history that I venture to present my version of it to the Institute, and to call attention to some of its most important palaeographical contributions to our knowledge. Unfortunately the sign which designates the locality from which it comes, I am unable to identify. The writing shows the document to be older than the Blau monuments, but later than the archaic inscriptions published last year by Father Scheil in his *Textes élamites-sémitiques* and the *Receuil de travaux*.²

I hope, in connection with Miss Ogden, to publish the text, with complete commentary, at an early date. It reads as follows:

- I (1). IIIMV GANA DUK-KA DINGIR ?-LAG
 (2). SAL-LAL-TUR
 II (1). IIIMVICL URI-NI-A SIG LIK-A
 (2). IIIMVICL ĠAL PI NER-A DA-KU GUR DIMMENA
 BABBAR NIN-A TAB BAR(UMUN)
 III (1). IIIMVIC E BABBAR LUĠ AB TAB BAR
 (2). IIIMVICL IGI KUR IR DU BAD LIK-A GAR-A
 (3). GIR SAG

i.e. "3005 Bur of a field of clay, to the god ? presented Sallaltur. 36050 cubits on its Akkadward side, the lower (side), from the beginning; 36050 cubits running along the breadth of the ziggurat of Shamash, the lady who pours forth brightness; 36050 cubits (along) the temple of Shamash, the messenger of Ab, who pours forth brightness (*i.e.* Sin); 36050 cubits before the mountain unto the abode of Ishtar (?), to the beginning, for making brick. May he give strength, may he bless."

(2) *The Haverford Library Collection of Cuneiform Tablets.*

Through the generosity of Mr. T. Wister Brown, of Philadelphia, a collection of four hundred cuneiform tablets was purchased for Haverford College early in October of the present year. By the desire of the donor, the collection is to be known as the "Haverford library Babylonian collection." The tablets were purchased of Mr. Gullabi Gulbenkian, of New York. They are inscribed in the cunei-

¹ Page 213, n. 5.

² One of them was repeated in the *J. Am. Or. S.*, XXII, pp. 126 ff.

form character of about 2400 B.C., and are of various sizes. Some of them are large and flat, containing from two to five columns of writing on each side, while others are much smaller. A very interesting series of temple receipts, most of them about $1\frac{1}{2}$ by 2 inches in size, contains a number of case tablets.

I have catalogued about eighty of these tablets and find them to be lists of sheep, goats, asses, and various kinds of supplies, as well as receipts for grain and other kinds of food, similar to the tablets published in Parts VII, IX, and X of the *Cuneiform Texts* recently issued by the British Museum, and also similar to those published by Reisner last year in the *Mittheilungen* of the Berlin Museum, under the title *Tempelurkunden aus Telloh*. Judging from those already catalogued, the Haverford tablets are also from the archives of the temple of Telloh. One of the temple receipts reads:

"1 kid of royal quality from the mountain; 1 kid of royal quality for Tammuz the shepherd Mirburrum brought; he gave it to the temple. (Dated) Month of the festival of Tammuz, the year after Urbillum was destroyed."

It bears the seal of "Ur-Nina, shepherd of the sheep offered to Ningirsu." The name Ningirsu identifies the locality with Telloh. Urbillum was destroyed in the forty-eighth year of Dungi, and again in the third year of Bur-Sin II. This document must, therefore, come from one of these reigns. All the dated tablets so far catalogued come from one or the other of these reigns, *i.e.* approximately 2400 B.C.

5. Miss Lucia C. C. Grieve, of New York, *The Dead who are not Dead*.

The laws of ancient Athens declared that those for whom the burial service had once been performed, *i.e.* travellers or soldiers reported dead, or persons suffering from suspended animation, were impure and not to be admitted to intercourse with their fellow-men. To evade this law, such persons, as a means to their restoration, were required to allow themselves to be treated as infants. A similar custom obtained in Rome, but the person to be restored must climb into his house through the roof. In India an elaborate and costly ritual was necessary, the restored man still acting the part of a new-born child. These coincidences do not argue the existence of this practice in the original Indo-European stock, but are the outcome of the inherent feeling for organized government, and probably date from an early period. Such a practice, either in the law or in its evasion, was impossible among the ancient Egyptians, and not in

accord with what we know of the Semitic races. Traces of it are found in various parts of India at the present day.

Remarks were made by Professor A. V. W. Jackson.

6. Professor Samuel Ives Curtiss, of Chicago Theological Seminary, *Ancient Sacrifice among Modern Semites*.

This paper is based on researches and discoveries in Syria, Palestine, and the Sinaitic Peninsula during the years 1898-1901, made through personal interviews with Arabs and Syrians, interpreted by Rev. J. Stewart Crawford, of Nebk, and others.

(1) The use of blood in connection with sacrifice was first observed among the Arabs of Ruheibeh in the Negeb, of *semn* (Arab butter) and *henna*, on shrines in the land of Edom, and inside the traditional tomb of Aaron on Mt. Hor, near Petra, also on the doorposts and lintels of shrines in the Druse mountains, and on the cupola of Nebi Iyub at Busan, and on three short pillars in front of it (Heb. *mazzeboth*).

(2) The unanimity of the testimony in all parts of northern Syria and among all classes of people, that "*the bursting forth of blood*" is the essential element in sacrifice, is remarkable.

(3) In what does sacrifice consist? I have undertaken my researches in the full persuasion that the "sacrificial meal" was the primitive form of sacrifice among the Semites. My earliest investigations seemed to confirm this view—no part of the animal is burned, it is boiled and eaten as a feast. After very extended inquiry in all parts of the country, I found that the feast was simply an incident, that it is non-essential to the idea of sacrifice, but that the "*bursting forth of blood*" is essential; that is, the death of the victim, this, and this only, is sacrifice. The saint (*weli*) is sometimes considered as the giver of the feast, for the animal was given to him and is his, but he is not conceived of as being present as host.

(4) The sacrifice is a redemption (*fedou*); e.g. "every house must have its death,—man, woman, child, or animal." The life of an animal is accepted for the life of a man, "Spirit for Spirit," "it becomes a *kaffarah* (Heb. *kipproeth*, covering) for his sins."

7. Professor A. V. Williams Jackson, of Columbia University, *Some Archaeological Memoranda made in India*.

Professor Jackson described first a visit to Sanjan, with a view to identifying the probable site of the oldest Parsi "Tower of Silence"

in Hindustan; and then gave an account of a shrine or temple near Rawel Pindi in Northern India, where a sacred fire is perpetually kept burning. Although the guardians of the fire are Moham-medans, grounds were given to show that we have here apparently a survival of an influence of the Persian fire-cult, which may be shown elsewhere in Northern Hindustan.

The second half of the paper was devoted to throwing light on certain passages in Sanskrit dramas by illustrations of archaeological remains at Benares and Sanchi.

8. Dr. William Hayes Ward, of New York, *Symbols of Babylonian Gods.*

Besides the multitude of representations of Babylonian and Assyrian gods, there appear in the art of the peoples numerous figures that are evident symbols of gods. Some are easy to recognize. The crescent is the moon-god Sin; the thunderbolt is the storm-god Ramman. On cone seals of the Assyrian and later periods columnar representations appear; whether altars or gods is not always clear. These columns were called *asherim* by the Hebrews, but it has not been noticed by students of Hebrew archaeology that they were not alike, and must be differentiated. The Roman Hermae were similar figures. In his study of the Monolith of Salmanasar, Von Luschan has gathered the representations of symbols of gods accompanying figures of Assyrian kings, and compares them with the lists of gods mentioned in the several inscriptions, but without very satisfactory identifications. But the bas-relief of Bavian (Sanherib) gives twelve emblems, and twelve gods are mentioned, and both in the same order, which identifies these twelve, and shows that the column with a ram's head is Ea, the double column Nebo, the column with the two lions' heads is Nergal, and the column with the lance-head is Marduk.

We now turn to the boundary stones, or grants of lands, and gain much more light from one found by De Morgan in Susa, on which the names of the gods accompany the emblems, though not all are well preserved. These confirm the conclusions from the bas-relief of Bavian and add other identifications, such as the fire-god Nusku, represented by a lamp. We learn that Ea was represented not only by the ram, but by the capricorn with a fish's tail. Some emblems yet remain to be identified.

9. Miss May Louise Nichols, of Farmington, Conn., *The Origin of the Red-figured Technique in Attic Vases.*

The question as to the origin of the red-figured technique in Attic vase-painting belongs to the domain of theory rather than of scientific proof. For, as has been truly said, the red-figured technique never had any development in the true sense of the term, but all at once flashed upon the mind of the vase-painter as a fully developed idea. But although it may never be possible to know the exact facts as to the origin of this technique, it is possible to note some tendencies of the times, and to trace some steps in the history of vase-painting and sculpture which may have led to the conception of this idea. This is all that the present paper attempts to do.

The strong tendency toward naturalism visible in Greek art of the sixth century, and the fact that that century was an age of experiment, of inventions, and of steady progress toward the most effective use of color in both painting and sculpture, are emphasized.

Examples are cited to show the tendency in terra-cotta, sculpture, and vase-painting, toward the use of a light color for the figures and some dark color for the background. It is found in vases of the 'polychrome' technique, whose origin is assigned to the so-called 'Dorian technique' of the old Argive pottery; in the grave stelae such as that of Lyseas; in the sarcophagi such as those of Clazomenae; and in some of the Gorgoneion cylixes which, as a class, furnish an excellent illustration of the tendency of the age toward experiment. Theories which assign to any one of these *exclusively* the origin of this red-figured technique are deemed inadequate, as they *all* express the same tendency; while with all these works about him to suggest the idea consciously or unconsciously, nothing seems more natural than that some ingenious vase-painter should have conceived the idea of the simple red-figured technique.

10. Dr. George H. Chase, of Harvard University, *Some Terra-cotta Types from the Heraeum.*

Besides the typically Argive style of terra-cottas, *i.e.* flat-bodied female figures with a tendency to elaborate plastic ornamentation, there were found in the excavation of the Heraeum a considerable number of figures of the ordinary archaic type. These are, for the most part, draped female figures both with and without attributes in their hands, similar to a large class of terra-cottas found all over the Greek world. At the Heraeum, however, it is noteworthy that these figures are relatively far less important than at any other Greek site where similar terra-cottas have been found. Furthermore, a number of our archaic specimens show clear traces of Oriental influence, while the attributes which many of the figures carry are in no case

attributes of Hera. It seems probable, therefore, that these archaic terra-cottas were not originally a native Argive product, but were copied from foreign types. Three single specimens, a group of two lions, a flying female figure (perhaps a gorgon), and a group representing a bull and a lion, are noteworthy because of their similarity to well-known sculptures.

FRIDAY, DECEMBER 27. 2.30 P.M.

Joint session with the Society of Biblical Literature and Exegesis.

After the address by Professor Edward Q. Hincks, of Andover Theological Seminary, on *Some Tendencies and Results of Recent New Testament Study*, the following papers on archaeological subjects were read :

1. Professor Franz Boas, of Columbia University, *Some Problems of American Archaeology*.

Owing to the absence of literary information in regard to the early history of America, methods of American archaeology are similar to those of European prehistoric archaeology. Archaeological investigations in America can be made fruitful by the application of ethnological experience, since probably the customs of the ancient inhabitants of America were similar to those of the present Indians. Some of the most interesting problems in American archaeology are met with on the Pacific coast of the continent, where, at the present time, a great diversity of languages are spoken, where distinct types occur, and where the culture is also highly differentiated. Ethnological evidence indicates that at an early time intercourse took place between the eastern plains of America and the Pacific coast. This fact is also borne out by archaeological evidence particularly in the region of the State of Washington and southern British Columbia. It would seem that there has been early intercourse between the Indians of the North Pacific coast and the inhabitants of Siberia, while the Eskimo who at present inhabit Alaska appear to be recent intruders. The solution of these problems requires a thorough archaeological investigation of the east coast of Bering Sea and of the Pacific coast between Columbia River and Vancouver Island.

[This paper appears in full above, pp. 1-6.]

2. Dr. William Hayes Ward, of New York, *The Hittite Lituus*.

One of the peculiar points often recurring in the so-called "Hittite" art is the rod, curved up at the bottom, held in the hand of a king, or priest, and generally designated a "lituus." It differs from the lituus held by Roman augurs, in that it is held at the top, and the curve is at the bottom, thus reversing the Roman style. This "lituus" occurs on the rock sculptures of Boghaz-Keui and on numerous seals.

A "Hittite" seal-cylinder which has lately come into my possession makes clear what this "lituus" is. On this seal are figured the two principal Hittite deities, the goddess corresponding to Ishtar, or Venus, holding open her garment to show her exposed body, and the warrior god Teshub, who holds in one hand a club over his head, and in the other two objects, one a rope attached to a ring in the nose of a crouching bull before him, and the other the "lituus."

This "lituus" is drawn with unusual care. It is clearly a serpent held by the neck. The mouth is open, and the eye is clearly seen. The curved lower end is simply the tail of the serpent bent upward.

We already knew that the Hittites paid reverence to the serpent, as I have previously published a cylinder, with Hittite inscription, showing the worship of a *Nehushtan*, or brazen serpent on a pole. The serpent, or more usually two serpents arranged as a caduceus, was carried by Babylonian gods; and Gilgamesh is even seen, on an Assyrian sculpture, strangling a serpent, as did Hercules, and as does the Hittite god on this seal.

3. Professor Theodore F. Wright, of Cambridge, Mass., *Figurines from Tell Sandahannah.*

This mound, lying about twenty miles southwest of Jerusalem, has been excavated by the Palestine Exploration Fund and has been found to contain lamps, jars, vases, bowls, plates, weights, figurines, inscribed stones, and many coins.

I. There are sixteen figurines cut out of thin lead. Human figures are rudely but clearly represented, and all are in attitudes of agony and are bound hand and foot with wires of lead, iron, and bronze. They were at first regarded as images of captives, but are now seen to represent persons who were to be attacked by means of sorcery. This view is supported by references to the immediate explanations of Professor Wunsch, of Breslau, and M. Clermont-Ganneau, and to the treatises on Magic in Hastings' *Bible Dictionary*, and by Budge, Jastrow, and others. Accompanying the figurines were tablets having some Hebrew but mostly Greek inscriptions, not yet fully deciphered, but containing curses.

II. One figurine in terra cotta represents a draped female figure with peculiar head-dress. This may represent Astarte, but is more likely a figure of Saint Anna, mother of Mary, whose name is the common explanation of the term Tell Sandahannah, Saint Anne. Cimabue gave the Madonna a similar head.

Professor Theodore F. Wright then read the *Report of the Board of Managers of the American School in Palestine*.

At the meeting of the Society of Biblical Literature and Exegesis held December 28, 1900, the Committee appointed to establish the American School of Oriental Research in Palestine presented its final report and was discharged. The management of the School then passed into the hands of the contributing institutions and individuals named in said report, and by them a Board of Managers was chosen for the ensuing year. To this Board of five members, Professor John Williams White, being President of the Archaeological Institute of America, was added *ex officio*. The Board was organized by choosing a Chairman and a Secretary. Professor J. H. Ropes was requested to act as Treasurer and has done so.

The previous Committee had appointed Professor C. C. Torrey as the first Director. His report, which is made a part of this report, will show the faithfulness of his work under unexpected difficulties. Professor H. G. Mitchell is now in Jerusalem as the second Director and reports favorably as to the continued assistance of U. S. Consul Merrill, the development of the library, and the work being done by him and his one regular student. This is Mr. Martin A. Meyer, a graduate of the Hebrew Union College, Cincinnati, whose examination for the fellowship offered by the Archaeological Institute showed that he was the best qualified of the three candidates. Professor Mitchell will give special instruction for limited periods to some others.

There are now twenty-one contributing institutions, namely, Andover Theological Seminary, Auburn Theological Seminary, Boston University, Brown University, Bryn Mawr College, Colgate University, Columbia University, Cornell University, the Episcopal Theological School in Cambridge, the General Theological Seminary of New York, Harvard University, Hebrew Union College of Cincinnati, Johns Hopkins University, McCormick Theological Seminary, the University of New York, the University of Pennsylvania, Princeton University, Princeton Theological Seminary, Trinity College of Hartford, the Union Theological Seminary of New York, and Yale University.

The subscription being made through the labors of Dr. James B. Nies for an endowment excavation fund now amounts to about \$30,000.

The decease of Professor Joseph Henry Thayer on the twenty-sixth day of November has removed from the Board of Managers its head and most active member. The School originated with him and had his constant attention and generous service until his strength failed. May it become the worthy monument of this sincere friend of man, ripe scholar, and beloved teacher.

Respectfully submitted by the Board of Managers:

GEORGE F. MOORE,	JOHN WILLIAMS WHITE,
JOHN P. PETERS,	THEODORE F. WRIGHT.
WM. HAYES WARD,	

DECEMBER 10, 1901.

Dr. Nies then read a report on the Endowment Fund for Exploration and Excavation under the Direction of the School in Palestine.

4. Professor Louis B. Paton, *The Civilization of Canaan in the Fifteenth Century B.C.*

[No abstract of this paper has been furnished.]

5. Professor John H. Wright, of Harvard University, *Some Aspects of the Work of Heinrich Brunn.*

[No abstract of this paper has been furnished.]

6. Professor William H. Goodyear, of the Museum of the Brooklyn Institute of Arts and Sciences, *New Observations on Architectural Refinements in Italian Churches.*

[This paper will appear in full in an early number of this JOURNAL.]

SATURDAY, DECEMBER 28. 9.30 A.M.

1. Dr. Enno Littmann, of Princeton University, *Four Early Palmyraean Inscriptions.* (Read by Professor W. K. Prentice.)

The American Archaeological Expedition to Syria in 1899-1900 found in Palmyra among others four ancient inscriptions with very interesting archaeological details. Two are honorary inscriptions on the brackets of two columns in the so-called Temple of the Sun.

They are of great importance, because they show that a temple on this site was begun at least as early as the first century after Christ. One was executed in honor of a prominent citizen by his sons in the year 28–29 A.D., the other by the community of Palmyra in 70–71 A.D., in honor of a man who contributed to the building of the temple. The other two inscriptions are on altars found outside of the city. One is dated 34 A.D. This altar was erected by the members of a “*thiasus*,” i.e. a religious society which had charge of a certain festival. This explanation was given to me by Professor Clermont-Ganneau, who has found the same festival in the Old Testament, in Phoenician inscriptions, and in the famous Mâdeba map. The fourth inscription states that a Nabataean, who had been commander of cavalry in a garrison on the Euphrates, erected two altars in honor of his own national god, a god whose name was unknown until recently, but was discovered at the same time in Palmyraean, Nabataean, and Safaitic inscriptions.

2. Dr. Carroll N. Brown, of Asheville, N. C., *Fragment of a Treasure List found in the Acropolis Wall of Athens.*

The inscription is one of several discovered by Mr. Brown while a fellow of the School of Classical Studies at Athens (1896–1898). It is a fragment of a treasure list dating from a period shortly before the middle of the fourth century B.C., and similar to many inscriptions already published in *C.I.A.* II, 2. It has been possible to restore it very fully by comparison with these lists, and in its turn it casts new light on portions of them that were obscure or lacking. Thus in *C.I.A.* II, 2, 677, II, l. 38 and 680 l. 11, ἐπτά should be τρεῖς or τρεῖς. In *C.I.A.* II, 2, 677, II, ll. 38 sqq.; 680, ll. 5–14; 681, ll. 23–33; 711, ll. 6–13, weights of two vessels may be restored, and *C.I.A.* II, 2, 681, ll. 24–33, and 711, ll. 6–7, may be corrected in other points. *C.I.A.* II, 2, 678, A. I, l. 21, may be restored with absolute certainty. *C.I.A.* II, 2, 684, is found to form part of the new inscription and must be entirely rewritten to accord with it. Koehler's proposed readings here, though probable in themselves, are found to be untenable in several particulars. In *C.I.A.* II, 2, 714, l. 6, ὄλ[οσίδηρος] should be restored and *C.I.A.* 676, ll. 1–3, should be emended to agree with the new inscription. In *C.I.A.* II, 2, 676, l. 4; 701, II, l. 51; 713, l. 16, the lacunae should be filled by the words [ὁ Σμικίθη] ἀνέθηκεν. In *C.I.A.* II, 2, 652, B, l. 11, κατακεχρυσωμένοι should be σεσημασμένοι.

Δοκιμῆα χρυσίου, testing specimens, and λῆλαι χρυσαῖ, show specimens of weights used in weaving, are for the first time described

fully enough to allow us to form some conception of their size and use, and in recording the weight of the former a new sign, Ε (= τεταρτημόριον), is used. ($1CE = 1\frac{3}{4}$ obols.)

3. Dr. Ernst Riess, of New York, *The Place of Classical Archaeology in the Secondary School*.

[No abstract of this paper has been furnished.]

Remarks were made by Dr. Sachs and Professor J. H. Wright.

4. Professor Karl P. Harrington, of the University of Maine, *A Canard, A Quarry, A Query*.

A canard, in my opinion, is the idea of O. E. Schmidt, that the remains of an ancient tomb, perhaps that of Cicero himself, adjoin the church of San Domenico, near Isola Liri. The large stones of the foundation may have served other purposes in Cicero's villa near by; and the supposed opening into the tomb is doubtless merely a drainage canal.

An archaeological quarry may be found in the church and abbey of San Trinità at Venosa, the birthplace of Horace. The walls, which are in a ruinous condition, are so full of fragments of inscriptions and other objects of interest that they could be easily worked to good profit, by the American School in Rome, for example.

The query is whether Schmidt is not essentially correct in locating Cicero's *Pompeianum* just outside the Herculean gate. Cicero would inevitably have required beauty of natural scenery and convenience of access in selecting the villa. Convenience in this case must have meant proximity to the harbor. The elevation back of the two houses next to the Herculean gate meets both conditions, harmonizing also with the supposed location on the "*via Graeca*," and with the local tradition as to the site. The important part of the villa would have been on the hill itself.

5. Professor Mortimer Lamson Earle, Barnard College, Columbia University, *Notes on the Greek Alphabet*.

I. *Of the Evolution of the Supplementary Aspirate (Spirant) and Assibilate Signs*. — The evolution of the characters Φ and Χ must be first discussed. In regard to the evolution of the former character the theories may be grouped under the two heads, morphological and phonological. The morphologists, who would derive Φ simply and arbitrarily from Φ (ϕ), are represented by Franz and Larfeld; the phonologists, who would derive the new aspirate (or spirant) character from the traditional aspirate ⊕, are represented by François Lenor-

mant and von Wilamowitz-Moellendorff. Probability seems to point to the development of the new character for *ph* under the impression of a desire to give alphabetic expression to *ph* and *ch* to match *th* (⊙) and fill out the scheme

B . Γ
Γ . K
Δ ⊙ T

Thus from the obsolescent or obsolete guttural sign that stood next to Γ. was derived the new character for *ph* (phei), partly on account of a certain similarity between the guttural character and the form of theta and partly on account of a phonological relation between the theta and the sound to be represented by the new character. The development of the character for *ch* (X or +) followed from this, the form of the new sign being due perhaps partly to kappa (K), partly to theta (⊙).—As for Ξ with the power of X (*chs*, *ks*), its use in this function was due to the phonetic value of zeta (Ζ) and the resemblance of the latter sign to the obsolete character Ξ (samega?). The old sign with its new power and a name similar to phei and chei (viz. xei) retained its traditional place in the alphabet. For *ps* (*phs*) a new sign with the name psei was placed at the end of the alphabet (after X), its form due perhaps in part to all the three of the preceding signs Υ Φ Χ.

II. *Of the Names of the Original Letters of the Greek Alphabet.*—A comparison between the traditional Greek names and the traditional Hebrew names. The Greek names represent, it would seem, Phoenician names in some cases different from the Hebrew. It is suggested that samekh would naturally have given samega. May this not have been misunderstood as sammega (i.e. sam mega) and the name simply rejected by the Ionians? The Ionic name sigma would then be a characteristic name for the sole remaining simple sibilant.

III. *Of the Beta Signs.*—Remarks on the beta signs that diverge from the common Greek type (Β). Theraean beta (Ϝ) treated as a differentiation of Ϝ = Ϝ (pei). Two, or perhaps three, primitive Greek forms of beta suggested.

IV. *Of the Sixteen-letter Alphabet.*—The differing views of Professor Sophocles (1848) and W. Schmid (1893) about the origin of the grammarians' notion that the primitive Greek alphabet had but sixteen letters. Professor Sophocles's view seems the more plausible.

6. Professor Fitz Gerald Tisdall, of the College of the City of New York, *The Credibility of Xenophon's Anabasis.*

The credibility of a history depends on the fulness and accuracy of the author's information and his impartiality, which includes honesty and freedom from bias.

The character of Xenophon is depicted in *Anabasis* III, 1, 4 ff., as devoid of patriotism, unscrupulous, and careless of truth. Some parts of this passage are scarcely credible. As confirming this view of his character, the question of his age at the time of the *Anabasis* is considered. The opinion at present prevailing is that he was about thirty years old,—the age he assigns to Proxenus,—and this is based wholly upon statements, or rather inferences from statements, in the *Anabasis*. The correct view that he was forty-three or forty-four rests upon Strabo and Diogenes Laertius, two impartial witnesses of different periods, not seriously contradicted by Plutarch. The expression of Xenophon after his dream, ποίαν δ' ἡλικίαν ἐμαντῶ ἐλθεῖν ἀναμένω, implies mature age; and the passage with Seuthes is only explicable on the same supposition. That Proxenus was his ἀρχαῖος ξένος is irreconcilable with the age of thirty; whereas if both were forty-three or forty-four, the difficulties disappear.

The story of Xenophon's rise in part of one night from being a civilian friend of Proxenus to the position of virtual commander of the Greek army is untrustworthy. So also that of Xenophon's deeds thereafter. The manoeuvre against the Colchians is instanced as a passage calculated to deceive by giving the reader the impression that Xenophon invented a new form of attack, whereas it must have been well known to the soldiers.

As errors of statement, the incredible number of one million two hundred thousand in the king's army stamps Xenophon as careless or ignorant. The error of over three hundred miles in distance in the *Anabasis* invalidates many of his distances and makes the whole uncertain. The battle of Cunaxa, containing the incredible rout of six thousand Persian cavalry by six hundred Persian cavalry under Cyrus, ending with the death of himself and all his attendant nobles, is not trustworthy.

The *Anabasis* is a good story containing much information, but not to be considered as veracious history.

After this paper, Professor F. W. Putnam, of Harvard University, read a *Report on the Establishment of the Travelling Fellowship in American Archaeology*.

7. Miss Harriet A. Boyd, of Smith College, *Mycenaean Discoveries at Gournia, in the Neighborhood of Kavousi, Crete*.

[Miss Boyd showed and explained a series of views, illustrating her recent excavations at Gournia. See p. 71.]

8. Miss Blanche E. Wheeler, of Providence, *The Pottery at Gournia*.

The excavations at Gournia, Crete, in 1901, yielded extensive remains of pottery. Though much of it was broken, a remarkably large number of vases was found whole. This pottery may be briefly classified as follows:

I. Monochrome pottery, made of: (a) coarse red clay, used for pithoi and other large vessels; (b) coarse yellow clay, used for amphorae; (c) fine red, pinkish, gray, and yellowish clay, used for cups, bowls, etc.

II. Pottery made of fine pinkish clay, with a red or black slip, usually very thin, often metallic in quality, used for cups and bowls.

III. Painted pottery, made of: (a) fine red, pinkish, and yellowish clay; (b) rather coarse pink or yellow clay.

The designs are bands, zigzag lines, wave lines, and dots; plant patterns, such as the vine, fern, large heart-shaped leaf, ivy, and crocus; spirals; representations of marine life, such as the cuttlefish, nautilus, and seaweed; the double axe; rosettes; and small flowers or petals between spirals.

The colors of the decoration are white, red, and black. Sometimes the last two colors appear in alternate bands, showing that they were thus used intentionally. On many vases the color shades from black to bright red, as a result of uneven firing. White bands and dots are often painted on the red or black decoration. One fragment has, in addition to these bands and dots, a white spiral resembling tendrils. The colors are both lustreless and lustrous. A slip of the same color as the clay is usually applied first and on it the design is painted, but in some cases the design seems to have been painted directly on the clay.

The variety of shapes is great,—cups, bowls, pitchers, ewers, amphorae, stirrup-jugs, “schnabelkannen,” jars, fillers, and many shapes as yet unclassified.

With a few exceptions the pottery is wheelmade. The shapes are graceful, and the decorations are artistic, in many cases showing excellent technique. The pottery belongs to the so-called Island ware. It represents, generally, the late Mycenaean style, as is shown by the overcrowding of the space with ornamentation.

9. Mr. William Warner Bishop, of the Polytechnic Institute of Brooklyn, *Roman Church Mosaics of the First Nine Centuries*.

Mr. Bishop described briefly a number of these pictures, and classified them with regard to their subjects and the placing of these subjects in the various parts of the church. The main results of the study were, first, that the apse is almost entirely given over to symbolic scenes; second, the tribune and triumphal arches have, generally, symbolic representations drawn from the Apocalypse; third, distinctly non-Apocalyptic Biblical scenes are found only on the tribune arch of one church, SS. Nerèo ed Achilleo, and in the panels of the nave of S. Maria Maggiore. This church, however, is the only one in which the nave mosaics have been preserved. It was shown that the mosaics in S. Paolo and SS. Cosma e Damiano directly influenced the four mosaics made in the ninth century by order of Paschal I. If a Roman tradition as to the placing of subjects existed, it was different from that which is shown in the literary sources of the fourth and fifth centuries.

The following papers were read by title :

1. Professor John C. Rolfe, of the University of Michigan, *The Language and Style of the Preamble of Diocletian's Edict De pretiis Venalium Rerum.*

This document has, in a way, the same relation to the time of Diocletian that the *Monumentum Ancyranum* has to that of Augustus; yet its Latinity has, so far as I know, never been carefully examined, and it is seldom cited in our lexicons and handbooks.

On account of the many and flagrant blunders made by the stone-cutters the testimony of the Edict, especially in matters of orthography, has been lightly esteemed. This defect is, however, in part made good by the fact that we have several versions, and by a comparison of these the original text may be restored in many instances.

In the assimilation of prepositions the document shows surprising regularity, and a decided preference for the unassimilated forms. Thus we have *inmanitatem*, 1, 7 (*imm-*, A.); *inprobos* and *inmodestos*, 1, 9; *inprobos*, 1, 17; *inpedita*, 2, 11; *inmunis*, 2, 21 (*imm-* in S. (?); the reading is *iinmunis*). *Inmo*, 1, 9 (A. P.) and *senper*, 1, 21 (S. A.), 1, 23 (P. S.; *semper*, A.) and 2, 18, seem to be due to a false analogy with these forms. In no case is the unanimous testimony of the versions for the assimilated form, and in only one case (*collationem*, 2, 4, S. P.; *conl-*, A.) does the balance of evidence point that way.

An especially interesting orthography is *obtumsi*, 1, 18 (attested by P. S. G., while A. has *obtunisi*). The expression *quis adeo*

obtumsi pectoris . . . est is interesting for its parallelism with Virg. *Aen.* I, 567, on whose interpretation and orthography it throws light.

In spite of the grandiloquence and verbosity of the Preamble, its actual offences against classical Latinity are surprisingly few.

The following words and expressions are especially interesting from the lexicographical point of view; nearly all are inadequately treated in the lexicons: 1, 17, *intempestivo* (new word); 1, 2, *sudore largo*, for the usual *sudore multo*; 1, 2, *honestum publicum* (cf. *ex commodo publico*, 2, 23); 1, 3, *de praeterito* (new); 1, 9, *inmodestos* (new as a subst.); 1, 11, *temperamentum* (cf. 2, 22 and 1, 22); 1, 12, *quantum*, = *ut* (unique); 1, 15 *in peiora* (new in plural); 1, 22, *superis* (new in this sense); 1, 20, *exercitos habent* (said by Thielmann, *Archiv f. lat. Lex u. Gram.* II, 377, not to be found after Plautus); 2, 1, *quadruplo, octuplo* (new, if adverbs); 2, 10, *subditi* (new as a subst., at least in the singular).

[This paper will be published in full elsewhere.]

2. Professor George Hempl, of the University of Michigan, *The Runic Inscription on the Anglo-Saxon Sword found on the Isle of Wight*.

The runic inscription on the hilt of the Anglo-Saxon sword found in the Isle of Wight and now in the British Museum (*Stephen's Old Northern Runic Monuments*, III, p. 459) reads

ǣcō wǣri
'self-defence'

3. Dr. Edmund von Mach, of Harvard University and Wellesley College, *The Draped Female Figures from the Acropolis—An Attempt at Classification*.

A classification is possible from several points of view. Some of the classifications which may lead to definite results as to date, place of provenience, etc., are:

A. According to the treatment of the finger- and toe-nails. Not many nails are preserved. The upper fragment (Gardner, Fig. 12) shows an entirely different nail and fingertip from what is found on Athenian sculpture (cf. the stele of Aristion) while it strongly resembles the well-preserved nail of the second finger of the right hand of the "Hera" of Samos (not to be seen on photographs, because the fingers are bent up and hidden under the shadow of the drapery-fold). The nail is excellently preserved.

B. According to hair.

I. Number of braids. (1) Three braids. (2) Four braids. This is the later group. There is, however, at times an overlapping of group I.

II. Style of hair in braids. (1) Braids done in zigzag lines. (2) Braids represented by oblong strips cut by shallow horizontal lines or grooves. (3) When these lines are somewhat slanting and the strips themselves rounded instead of flat the effect is extremely natural (cf. Overbeck, Fig. 41 *b*, less satisfactorily Gardner, Fig. 28).

III. Style of hair over forehead and temples. (1) Hair running in even and parallel, fairly horizontal, layers over the forehead and continuing in the same direction over the temples (Tarbell, Fig. 94). (2) Hair over temples following a different direction from the hair over the forehead (Overbeck, Fig. 41 *a*). (3) Lowest row of hair differently done from upper rows. (4) At times in fantastic curls. (5) Direction of rows, vertical instead of horizontal (Overbeck, Fig. 41 *b*). (6) Fantastic curls not confined to the lowest row. Viewed from these several points of view the "Nike" of Delos, *e.g.*, falls in where she properly belongs; and the inaccuracy of the old date at the very beginning of the archaic period becomes clear.

IV. According to the direction of the folds of the drapery. (1) Folds straight on both sides. (2) Slanting on one side.

4. Professor Mary Gilmore Williams, of Mt. Holyoke College, *Studies in the Life of a Roman Empress*.

It is the purpose of these studies to compare the scanty evidence furnished by historians with the testimony of coins and inscriptions, so as to indicate the relation of Iulia Domna to her predecessors and to define her position in the Empire. With her the title of the Empress received its last important addition. She was named on coins, "Mater Augustorum duorum, Mater Senatus, Mater Patriae," when her sons became co-emperors. The amplified title, "Iulia Pia Felix Augusta Mater Augusti et Castrorum et Senatus et Patriae," was used after Geta's murder. She was the first Empress to be named on a milestone, and the first to be represented on coins with the legends *Liberal Aug.* and *Fortunae Reduci*. She was the only Empress who presided over the Secular Games, and who received an *acclamatio* from the Arval Brethren. Her name is associated with the Emperor's in giving the dates of several inscriptions. Coins and inscriptions presenting her name are more numerous than those in honor of any other Empress. Cohen records more than three hun-

dred and fifty coins. Most of the nearly two hundred inscriptions are of some public significance.

5. Professor James R. Wheeler, of Columbia University, *Heracles Alexicacus*.

[No abstract of this paper has been furnished.]

6. Professor James W. Kyle, of the William Jewell College, *The Maidens' Race on Attic Vases*.

A black-figured Attic lecythus, 22 cm. high, found in Salamis, now in the Central Museum at Athens, depicts three women running, evidently in a race. The figures, 6.50 cm. high, are unmistakably intended for women, since their faces, arms, and legs are white. Each has her hair done up in two large coils, on top of the head, and at the nape of the neck. Their loose flowing garments are girded up and wound about the waist, leaving the legs bare to half-way up the thighs. Arms and legs are extended in the violent striding fashion habitual in vase-paintings of racers. The exact similarity and regularity of their attitude and their preparations for running indicate a race. Furthermore the presence of a black object, in shape and size like an altar, with an irregular flame-shaped mass upon it, depicted just at the rear of the hindmost figure, seems to indicate some formal service in honor of a divinity. The simplest interpretation seems to be that this vase represents the eldest of the three sets of maidens who raced in the games held in honor of Hera at Elis, as described by Pausanias (Book V, 16). The dress of these figures does not harmonize exactly with Pausanias's account, but doubtless he merely described some victor's statue as he saw it. This vase seems to be the only one in existence depicting an athletic contest of women.

The comparative freedom of the painter in execution, and the delicately graceful shaping and fine finish of the vase, indicate a date near the end of the black-figured period.

7. Professor J. R. S. Sterrett, of Cornell University, *Descent reckoned μητρόθεν*.

[No abstract of this paper has been furnished.]

8. Professor W. N. Bates, of the University of Pennsylvania, *Etruscan Horseshoes from Corneto*.

In this paper the writer described and discussed four bronze horseshoes found near Corneto, and now in the Free Museum of Science

and Art of the University of Pennsylvania. They are half-shoes or sandals and all are excellently preserved. Each shoe has three holes for attaching, one circular hole near the centre, and two square holes at the ends of the shoe. The writer argued that these bronzes were really the soles of leather boots to which they were attached by means of a large rivet and straps. The boots were kept on by straps which crossed behind under the ankle, were then brought forward and crossed in front, and finally tied behind above the ankle, thus keeping the shoe firmly in place. The lower surface of each shoe has a number of projecting points, suggesting that they were to be used on ice. In general these shoes seem similar to the mule-shoes mentioned by Catullus. The tomb in which they were found probably dates from the fourth century B.C.

Of the following papers, which were withdrawn, no abstracts have been furnished: (1) Dr. James Dennison Rogers, of Columbia University, *On the πύργος of the Teian Inscriptions* (C. I. G. 3064, 3081) and the νομίσματα πύργια of Aeschylus, *Persians* 859. (2) Hon. Samuel J. Barrows, of New York, *Observations with Regard to the Translation of the New Testament into Modern Greek, with Reference to the Recent Disturbance at Athens*.